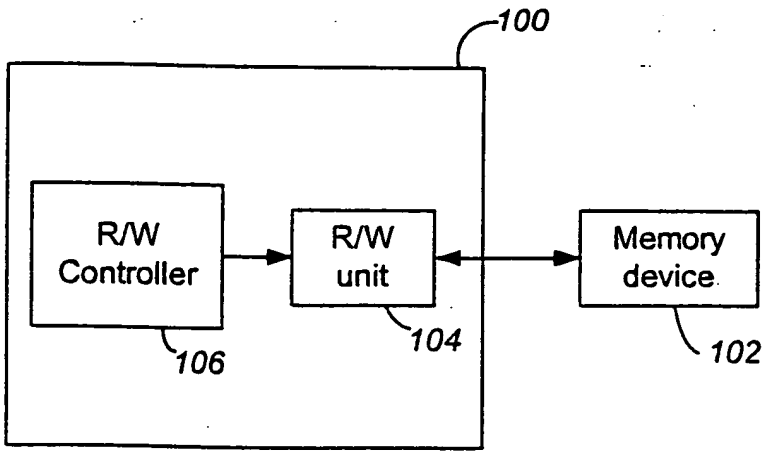
100
R/W Controller
R/W unit
Memory device
106
104
102

FIG. 1

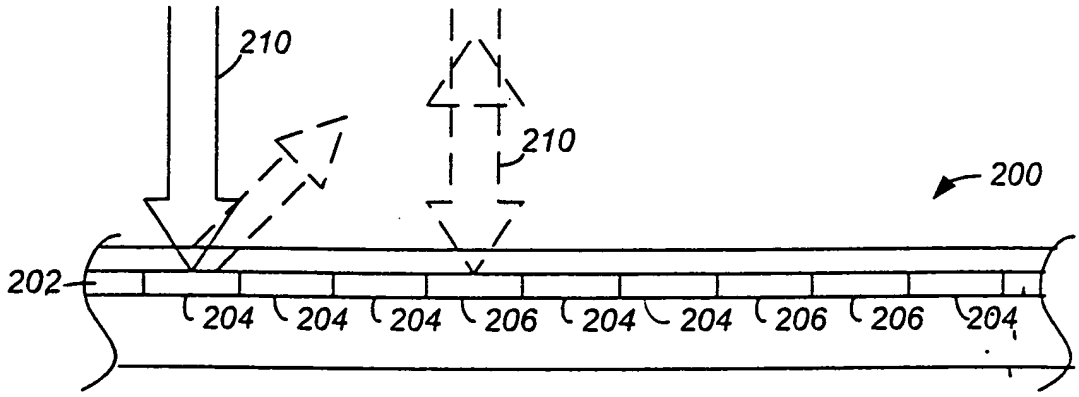
210
210
200
202
204
204
204
206
204
204
206
206
204

FIG. 2

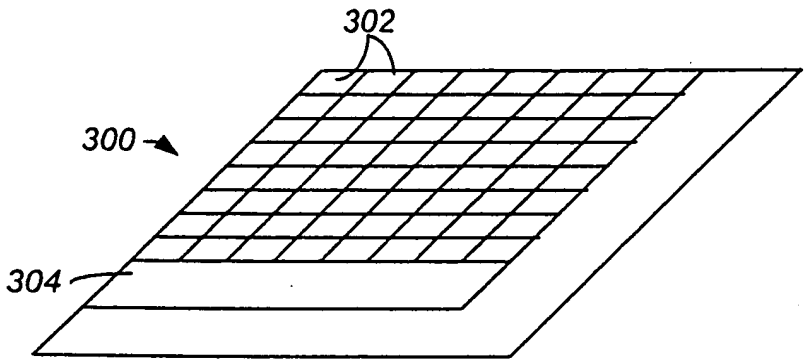

FIG. 3

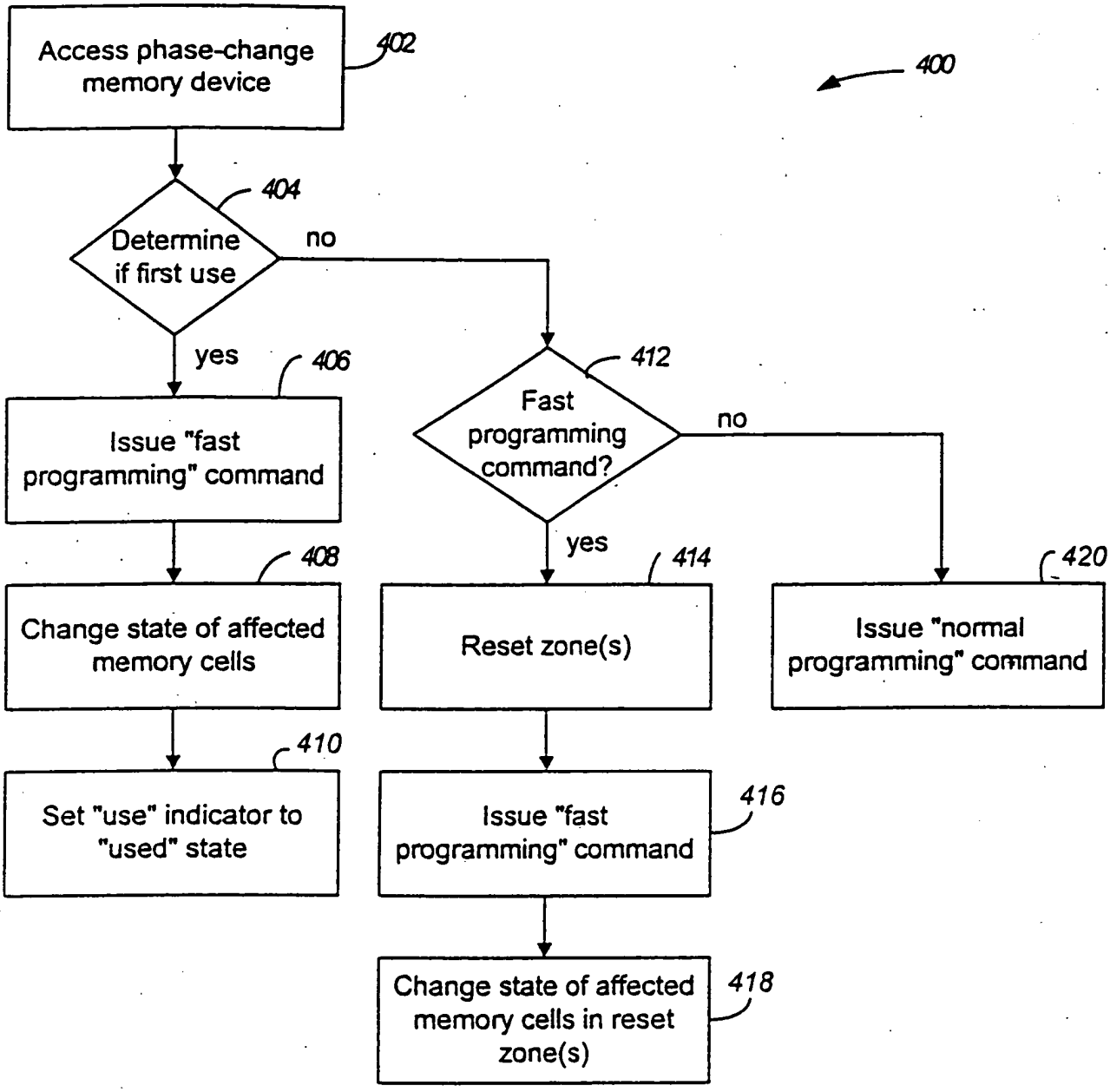
Access phase-change memory device
402
400
Determine if first use
404
no
yes
406
Issue "fast programming" command
Change state of affected memory cells
408
Set "use" indicator to "used" state
410
Fast programming command?
412
no
yes
414
Reset zone(s)
Issue "fast programming" command
416
Change state of affected memory cells in reset zone(s)
418
Issue "normal programming" command
420

FIG. 4